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| APPLICATION NO.                         | FILING DATE                      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|---|----------------------------------|----------------------|-------------------------|------------------|--|
| 09/681,184                              | 02/14/2001                       | Arlie R. Conner      | 1266-030                | 7800             |  |
| 32692                                   | 7590 05/02/2003                  |                      |                         |                  |  |
| 3M INNOV                                | 3M INNOVATIVE PROPERTIES COMPANY |                      |                         | EXAMINER         |  |
| PO BOX 33427<br>ST. PAUL, MN 55133-3427 |                                  |                      | NGUYEN, HOAN C          |                  |  |
|   |                                  |                      | ART UNIT                | PAPER NUMBER     |  |
|   |                                  |                      |                         | 2871             |  |
|   |                                  |                      | DATE MAILED: 05/02/2003 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |                         | $\sim$   |  |  |  |
|---|-------------------------|--|--|--|--|
|   | Application No.         | Applicant(s)   |  |  |  |
|   | 09/681,184              | CONNER ET AL.  |  |  |  |
| Office Action Summary   | Examiner                | Art Unit   |  |  |  |
|   | HOAN C. NGUYEN          | 2871   |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address<br>Period for Reply   |                         |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |                         |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>04 ∧</u>   | <u>March 2003</u> .     |  |  |  |  |
|   | is action is non-final. |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |                         |  |  |  |  |
| Disposition of Claims   |                         |  |  |  |  |
| 4)⊠ Claim(s) <u>1-39</u> is/are pending in the application.   |                         |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |                         |  |  |  |  |
| 5) Claim(s) is/are allowed.   |                         |  |  |  |  |
| 6) Claim(s) is/are rejected.  |                         |  |  |  |  |
| 7) Claim(s) is/are objected to.   |                         |  |  |  |  |
| 8) Claim(s) <u>1-39</u> are subject to restriction and/or e   | election requirement.   |  |  |  |  |
| Application Papers  |                         |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |                         |  |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |                         |  |  |  |  |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.  |                         |  |  |  |  |
| If approved, corrected drawings are required in reply to this Office action.  |                         |  |  |  |  |
| 12)☐ The oath or declaration is objected to by the Examiner.  |                         |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |                         |  |  |  |  |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).   |                         |  |  |  |  |
| a) ☐ All b) ☐ Some * c) ☐ None of:  |                         |  |  |  |  |
| 1. Certified copies of the priority documents have been received.   |                         |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No  |                         |  |  |  |  |
| <ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>   |                         |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  |                         |  |  |  |  |
| <ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>  |                         |  |  |  |  |
| Attachment(s)   |                         |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)   | 5) Notice of Informal   | y (PTO-413) Paper No(s) Patent Application (PTO-152) |  |  |  |
| J.S. Patent and Trademark Office  |                         |  |  |  |  |

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## **DETAILED ACTION**

## Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-32, drawn to an LCD with shifting the color-component subpixels, classified in class 349, subclass 5.
- II. Claims 33-39, drawn to method of dynamically aligning the colorcomponent sub-pixels after the display element, classified in class 353, subclass 46.

The inventions are distinct, each from the other because of the following reasons: Inventions I and II are related as apparatus and product made. The inventions in this relationship are distinct if either or both of the following can be shown: (1) that the apparatus as claimed is not an obvious apparatus for making the product and the apparatus can be used for making a different product or (2) that the product as claimed can be made by another and materially different apparatus (MPEP § 806.05(g)). In this case, the color-component sub-pixels can be aligned by the field sequential display method that illustrates in the prior art according to Fig. 2.

Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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Group I contains embodiments directed to the following patentably distinct species of the claims invention:

A: The species of first embodiment drawn to a dynamic post-display pixel element alignment system that includes a wheel with four flat refractive segments (Fig. 20);

B: The species of second embodiment drawn to a dynamic post-display pixel element alignment system that includes two prism arrays with piezoelectric actuator stacks therebetween (Fig. 18).

C: The species of third embodiment drawn to a dynamic post-display pixel element alignment system that includes a flat doubly birefringent crystal (Fig. 19).

If Group II is elected, Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, none of claims is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims

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are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HOAN C. NGUYEN whose telephone number is (703) 306-0472.

HOAN C. NGUYEN

Examiner Art Unit 2871

chn April 24, 2003

TOANTON
PRIMARY EXAMINER

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